

**To:** Burns, Francis[Burns.Fran@epa.gov]  
**Cc:** Hodgkiss, Kathy[Hodgkiss.Kathy@epa.gov]  
**From:** Ioven, Dawn  
**Sent:** Wed 2/5/2014 12:49:36 AM  
**Subject:** RE: Freedom Industries technical assistance request

Just spoke with Dr. Tierney. Told her that I am still working on the calculation, but will have something to her tonight. This is taking longer than I anticipated because my EPA laptop keeps disconnecting from the Internet and some of the input parameters needed for the shower model equation are very difficult to find for formaldehyde. I will continue to work on this tonight until the calculations are complete. Thanks.

Dawn

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Dawn A. Ioven, toxicologist

U.S. EPA - Region III

(3HS41)

1650 Arch Street

Philadelphia, PA 19103

215.814.3320

**From:** Burns, Francis  
**Sent:** Tuesday, February 04, 2014 7:37 PM  
**To:** Ioven, Dawn  
**Subject:** Fw: Freedom Industries technical assistance request

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**From:** Garvin, Shawn  
**Sent:** Tuesday, February 04, 2014 6:46:39 PM  
**To:** Hodgkiss, Kathy; Melvin, Karen; Wright, Dave; Burns, Francis  
**Cc:** Ryan, Daniel; D'Andrea, Michael  
**Subject:** Re: Freedom Industries technical assistance request

Kathy - Dr. Tierney tried to call Dawn but got voice mail. She has a hearing tomorrow at 10:00, and could really use some feedback before then. She can be reached at 304-356-4123 for awhile, and then can be reached at Ex. 6 - Personal Privacy after that. Could someone please give her a call and let her know what we know, or at least let her know if we can get her something by 9:15 tomorrow morning.

Thank you - Shawn

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**From:** Garvin, Shawn  
**Sent:** Tuesday, February 04, 2014 5:49:57 PM  
**To:** Hodgkiss, Kathy; Melvin, Karen; Wright, Dave; Burns, Francis  
**Cc:** Ryan, Daniel; D'Andrea, Michael  
**Subject:** Re: Freedom Industries technical assistance request

Thanks

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**From:** Hodgkiss, Kathy  
**Sent:** Tuesday, February 04, 2014 5:46:53 PM  
**To:** Garvin, Shawn; Melvin, Karen; Wright, Dave; Burns, Francis  
**Cc:** Ryan, Daniel; D'Andrea, Michael  
**Subject:** RE: Freedom Industries technical assistance request

Dawn is running the shower model now and will provide to Bob Helverson and Lora Werner (and me) who will in turn provide to Dr. Tierney. This should happen shortly. ATSDR will provide Dawn's phone number to Dr. Tierney if she has any questions.

**From:** Garvin, Shawn  
**Sent:** Tuesday, February 04, 2014 5:38 PM  
**To:** Hodgkiss, Kathy; Melvin, Karen; Wright, Dave; Burns, Francis  
**Cc:** Ryan, Daniel; D'Andrea, Michael  
**Subject:** Fw: Freedom Industries technical assistance request

Any thoughts?

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**From:** Popovic, Tanja (CDC/ONDIEH/NCEH) <[txp1@cdc.gov](mailto:txp1@cdc.gov)>  
**Sent:** Tuesday, February 04, 2014 4:39:51 PM

**To:** Garvin, Shawn  
**Cc:** Popovic, Tanja (CDC/ONDIEH/NCEH)  
**Subject:** FW: Freedom Industries technical assistance request

Shawn,

We just got a request from WV for assistance – see below – our SMEs believe that more along your lines. Given the sensitivity of the WV issues, heads up that this may come to you guys shortly.

My iPhone Ex. 6 - Personal Privacy

My work bberry being fixed as we speak

Tanja

**From:** Helverson, Robert (CDC epa.gov)  
**Sent:** Tuesday, February 04, 2014 2:49 PM  
**To:** Werner, Lora S. (CDC epa.gov); Kapil, Vikas (CDC/ONDIEH/NCEH); Murray, Ed (ATSDR/DTHHS/OD); Cseh, Larry (ATSDR/DTHHS/OD); Chaney, Sascha (ATSDR/OA/OD)  
**Cc:** Mellard, David (ATSDR/DCHI/EB); Markiewicz, Karl (EPA) (CDC epa.gov)  
**Subject:** Freedom Industries technical assistance request  
**Importance:** High

Good Afternoon Dr. Murray,

Dr. Tierney (WVBPH) called me a few moments ago regarding formaldehyde inhalation exposures from showering. Dr. Tierney has a hearing before the WV State Senate at 10 am tomorrow to discuss the water contamination event and she expects questions about formaldehyde regardless of its relevance to the actual spilled material. A former EPA researcher (no name offered) working at WVU spoke with Dr. Tierney and mentioned there is a shower model for assessing inhalation exposures to drinking water contaminants.

We have in the past used our own ATSDR-developed shower spreadsheet (based on EA model?) for evaluating chemical inhalation exposures and these modeled exposure calculations have been included in previous ATSDR documents (e.g. health consultations).

The specific technical assistance request is as follows: **Dr. Tierney would like to know if we can provide our shower model spreadsheet and/or determine the inhalation exposure value for formaldehyde based on Dr. Simonton's reported formaldehyde concentration of 32-33 ppb.**

Alternatively, we could direct her to the EPA model, although I have no knowledge of this model or how to access it. And I am not sure that would be too helpful unless the model was run for Dr. Tierney.

ATSDR Region 3 has worked directly with Dr. David Mellard in the past with these shower model efforts.

Robert H. Helverson  
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